

Forces of Nature

Foresight and Planning Saves a Cool Quarter Million following Bering Sea Storm.

Floods are arguably one of nature's most destructive forces. Every year they threaten lives, property, and infrastructure. Repairing buildings, roads, utilities are costly, while clearing and disposing of debris and cleaning invasive mold are outright arduous. The bottom line is that repair and recovery costs from flooding often wreak havoc on community budgets.

With proper preparation and mitigation, communities can minimize risk and save millions of dollars. Just ask Randy Romenesko, City Manager for Nome, Alaska (pop 3,500). He estimates that Nome's preparedness **saved more than \$250,000 in just two days.**

In October 2004, a violent gale force storm strafed the Bering Sea and was poised to pound Nome. For two days, the storm ravaged the coastline, driving 18 foot seas over Nome's protective seawall. When the storm subsided, the seawall was intact. However, damage to the Front Street business district was painfully evident. Building damage, debris from wind tattered buildings, standing water, street erosion, and utility damage testified to the storm's fury.

Yet, there was good news! The devastation would have been much worse and costlier to repair, were it not for the City's foresight and commitment to mitigation and emergency planning. Romenesko said, "In a single comprehensive initiative, we identified community and business leaders, studied vulnerable locations, developed effective mitigation strategies, and practiced disaster response plans."

"In 2000, we examined our emergency plan that we wrote in the early nineties. We found that it did not include businesses and important civic entities. With that before us, it was obvious we needed a plan for city and private interests," added Romenesko.

Nome received grant approval from the State Department of Commerce in 2001 to write a comprehensive flood and erosion mitigation plan. The City provided additional funding to make their plan a comprehensive all-hazards plan. By September 2002, the plan was drafted, presented at a public hearing, and approved. Six months later, Nome was the first city, with a population less than 10,000, to receive Federal Emergency Management Agency (FEMA) approval of its comprehensive Multi-hazard Mitigation Plan. And, it was only the second city, of any size, to achieve that goal. Romenesko said the \$10,000 plan included the services of a Homer consultant who brought clarity and a critical perspective to the process.

Planning for disaster

“One of our first goals was to examine flood plain maps, identify high risk locations, and envision worst-case scenarios. Then, for each scenario, we discussed who should respond, what resources would be needed, and how we could minimize damage.

“Knowing this, we invited city departments, volunteer agencies, and businesses to form a Local Emergency Planning Committee (LEPC). Public works, National Guard, police, utilities, the school district, fire service, health department, hospital, radio station, and port authority representatives participated. Our business partners included the AC Store, Norton Sound Health Corporation, Sitnasauk Native Corporation, and Crowley Marine Services,” he added.

“Then we went to school. We learned about Incident Command and Unified Command Management. More importantly, we learned how to work and communicate effectively as a team. We regularly practiced our skills at table top exercises, and established an emergency operations center,” Romenesko said.

The committee drafted mitigation strategies and wrote a critical Emergency Protective Measures (EPM) plan. It identified where recovery equipment would be sheltered, how to protect building perimeters, and what equipment and furniture should be moved. Long term strategies included adding sump pumps at critical locations and reinforcing doorways by reversing the doors. They anchored propane tanks to prevent them from washing away and breaking, potentially explosive, above ground service lines. Romenesko also explained that an effective mitigation strategy included strict enforcement of building codes and National Flood Insurance Program standards.

The Disaster

“This storm was our first real test. Once we knew it was headed our way, the LEPC met to review the EPM plan. We activated the Public Works department, building maintenance staff, and member employees of the LEPC,” said Romenesko.

Nome’s Public Library was a priority, because the subterranean Carrie M. McLain Museum was located in the basement. In addition to installing sump pumps in the elevator shaft and basement and modifying doorways, Emergency Protective Measures included building perimeter berms, barricading openings, and moving priceless artifacts upstairs. When the water receded, the building and the Museum avoided damage experienced by many other structures.

Nome's Mini Convention Center, a host venue for the Iditarod dogsled race, was also a priority. Sealing the windows and doors reduced flood damage significantly. Flood waters managed to seep in, but moving furniture and equipment to higher ground saved thousands of dollars and minimized clean-up.

Other simple strategies were very effective. Utility vehicles, earthmovers, dump trucks, and other equipment needed for the recovery were harbored at safe locations. When the storm subsided, Nome could respond quickly. Securing boats in the harbor and moving others to safer locations greatly reduced the damage.

No plan is effective without evaluation. "Within a week of the storm," explained Romenesko, "The LEPC was assessing what worked and what didn't. We weren't shy. We knew that critical evaluation would be an opportunity to learn and improve our plan."

If saving more than a quarter million dollars wasn't enough, there were many intangible benefits. Romenesko stated, "Our planning and training helped to build strong working relationships. There were very few surprises. Everyone knew their jobs and how others would respond to any given circumstance. Planning and communicating before a disaster is much more effective than introducing yourself and exchanging business cards at a disaster."

Romenesko concluded, "Another intangible benefit was credibility. Our professional response, before and after the storm, demonstrated our commitment to disaster preparation and recovery. We hope our citizens learn from our actions and prepare their homes and families for disaster."

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